30

Claims

1.   A method for printing a franking mark (28) on a
document (22), comprising the following steps:
5   a.   making available a unique bit string;
     b.   establishing an identification code;
     c.   securely printing the franking mark (28) on the
          document (22), said franking mark at least comprising
          information relating to the bit string and the
10   identification code;
characterised in that the bit string is selected from a
centrally stored set of unique bit strings and that the
unique bit strings which are made available for use are
centrally registered.
15

2.   A method according to Claim 1, characterised in that,
prior to step c, the unique bit string and the
identification code, protected with the aid of a first
message authentication code and/or protected by encoding,
20   are stored by a terminal (2) on an information carrier (18)
with memory, and step c takes place after the reading of
the information carrier by a printing device (20).

3.   A method according to Claim 2, characterised in that,
25   besides the unique bit string and the identification code,
a terminal identification code, protected with the aid of
the first message authentication code and/or by the
encoding, is also stored on the information carrier (18)
with memory by the terminal (2).
30

4.   A method according to Claims 2 or 3, characterised in
that after the reading of the information carrier (18) by
the printing device (20), use of the unique bit string for
printing a further franking mark on a further document is
35   rendered impossible by the printing device (20).

5. A method according to Claim 2 or 3, characterised in that, after reading the information carrier (18), it is checked whether the value of a counter on the information carrier (18) lies within predefined limits, and, if this is the case, the value of the counter is adjusted after reading and step c is executed, and, if this is not the case, step c is blocked.

6. A method according to Claim 1, characterised in that, upon execution of step c, use is made of a computer (50) and a printing device connected thereto (62).

7. A method according to any of the preceding claims, characterised in that the identification code comprises a user identification code and/or a printer identification code.

8. A method according to any of the preceding claims, characterised in that on the basis of the franking mark a second message authentication code is calculated and that this also is printed and/or the franking mark is printed in encoded form.

9. A method according to any of the preceding claims, characterised in that the set of unique bit strings is stored in a first central memory (38), used combinations of identification codes and unique bit strings are stored in a second central memory (40), franking marks printed on documents are read in, combinations of identification codes and unique bit strings which are present in the read-in franking marks are stored in a third central memory (42) and are compared to the used combinations in the second central memory.

32

10. A system for printing a franking mark (28) on a
document (22), comprising:

a. means (34) for making available a unique bit string;

b. means (4; 52) for establishing an identification code;

5 c. means (20; 62) for securely printing the franking mark
(28) on said document (22), said franking mark at
least comprising information relating to the bit
string and the identification code;

characterised in that the means (34) for making available

10 the unique bit string comprise a first centrally arranged
memory (38) with a set of unique bit strings, from which
the unique bit string is selected, and that means are
provided for centrally registering which unique bit strings
have been made available for use.

15

11. A system for printing a franking mark (28) according
to Claim 10, characterised in that said system comprises a
terminal (2) and a printing device (20), said terminal (2)
being arranged to store, prior to step c, the unique bit

20 string together with the identification code, protected
with the aid of a first message authentication code and/or
protected by encoding, on an information carrier (18) with
memory, and the printing device (20) is arranged to execute
step c after reading the information carrier.

25

12. A system according to Claim 11, characterised in that
the terminal is arranged to send a copy of either the
unique bit string together with the identification code and
the first message authentication code, or the unique bit

30 string and the identification code in encoded form, to an
exchange (34).

13. A system according to Claim 11 or 12, characterised in
that the terminal (2) is arranged to store also, besides

35 the unique bit string and the identification code, a

terminal identification code, protected with the aid of the first message authentication code and/or protected by encoding, on the information carrier (18) with memory.

14. A system according to Claim 11, 12 or 13, characterised in that the printing device (20) is arranged, after reading the information carrier (18), to render use of the unique bit string for printing a further franking mark on a further document impossible.

15. A system according to Claim 11, 12 or 13, characterised in that the printing device (20) is arranged, after reading the information carrier (18), to check whether the value of a counter on the information carrier (18) lies within predefined limits, and, if this is the case, to execute step c and to adjust the value of the counter after reading, and, if this is not the case, to block step c.

16. A system according to Claim 10, characterised in that it comprises a computer (50) and a printing device (62) connected thereto for executing step c.

17. A system according to Claim 16, characterised in that the system is provided with means (70) arranged remotely from the computer (50) to send the unique bit string, together with the identification code, protected with a first message authentication code and/or protected by encoding, to said computer (50) and to send a copy of said data to an exchange (34).

18. A system according to Claim 16, characterised in that the computer is provided with means (64) to print, with the aid of the printing device (62), the unique bit string together with the identification code, protected with a

34

first message authentication code and/or protected by encoding, on the document, and optionally to send a copy of said data to an exchange (34).

19. A system according to any of the Claims 10 up to and including 18, characterised in that the identification code comprises a user identification code and/or printer identification code.

10   20. A system according to any of the Claims 10 up to and including 19, characterised in that the system is arranged to calculate and print, on the basis of the franking mark, a second message authentication code and/or to print the franking mark in encoded form.

15

21. A system according to one of the Claims 10 up to and including 20, characterised in that the system further comprises a second central memory (40) for storing combinations of identification codes and provided unique

20   bit strings, central input means (44) for inputting franking marks printed on documents, a third central memory (42) for storing the combinations of identification codes and unique bit strings present in the inputted franking marks, and processor means (36), connected to the central

25   input means and the first, second, and third central memories, for mutually comparing the data in the second and third central memories.

22. An exchange (34) provided with a first central memory

30   (38), with a set of unique bit strings, a second central memory (40) for storing combinations of identification codes and provided unique bit strings, said combinations corresponding with franking marks (28) which are printed on a document (22), central input means (44) for inputting

35   franking marks printed on documents, and a third central

memory (42) voor storing combinations of identification
codes and unique bit strings present in the inputted
franking marks, and processor means (36), connected to the
central input means and the first, second, third central
5   memories, for mutually comparing data in the second and
third central memories.

23. Means for a device (20; 50) that is arranged for
printing a franking mark on a document (22), said means at
10   least being arranged for receiving data from an information
carrier (18), said data at least comprising a unique bit
string originating from a set of unique bit strings, for
compiling and making data available for the franking mark
(28) for the document (22) in protected form, so that said
15   device (20; 50) can print the franking mark (28) on the
document securely, said franking mark at least comprising
the said data as well as an identification code.

24. Means according to Claim 23, characterised in that
20   they are arranged to check, after reception of the data
from the information carrier (18), whether the value of a
counter on the information carrier (18) lies within
predefined limits, and, if this is the case, to instruct
the information carrier (18) to adjust the value of the
25   counter, and, if this is not the case, to block the
printing of the franking mark.

25. An information carrier (18), provided with a memory
which at least contains the following data: a unique bit
30   string, selected from a set of unique bit strings, an
identification code and a message authentication code which
is calculated on the basis of at least the unique bit
string and the identification code and/or the unique bit
string and the identification code in encoded form.

35

36

26. A computer-readable information carrier, provided with software, which, after being read, enables the computer to execute a method for printing a franking mark (28) on a document (22), comprising the following steps:

5   a.   the reception of a unique bit string;

    b.   establishing an identification code;

    c.   securely printing the franking mark (28) on the document (22), said franking mark at least comprising information relating to the bit string and the

10   identification code;

where the bit string is received from a centrally stored set of unique bit strings.

27. A data carrier wave provided with software for

15 downloading to a computer, which, after being read, enables the computer to execute a method for printing a franking mark (28) on a document (22), comprising the following steps:

    a.   the reception of a unique bit string;

20 b.   establishing an identification code;

    c.   securely printing the franking mark (28) on the document (22), said franking mark at least comprising information relating to the bit string and the identification code;

25 where the bit string is received from a centrally stored set of unique bit strings.